

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method of winding a toroidally wound electrodynamic machine characterised in that a set of bobbins are located in a rectilinear axially aligned array of adjacent bobbins, the rectilinearly located bobbins are wound with a continuous wire or a continuous set of parallel wires for each phase, the wound bobbins then being formed into a circular array as an electrodynamic machine winding.

2. (original) A method as claimed in claim 1 characterised in that the each phase is wound one bobbin at a time.

3. (original) A method as claimed in claim 1 characterised in that the assembly of pre-wound and electrically connected bobbins is formed into a circular array positioned about a toroidal core of magnetic material, such core passing through an aperture in each bobbin.

4. (original) A method as claimed in claim 1 characterised in that the bobbins interfit, to positively locate with each other.

5. (original) A method as claimed in claim 4 characterised in that the bobbins are manufactured jointly, as a single part or multiple inter-fitting parts which may be deformed into a toroid after winding.

6. (original) A method as claimed in claim 1 characterised in that the bobbins are provided with pathways to support the wires as they pass from one bobbin to another.

7. (original) A method as claimed in claim 6 characterised in that part of the pathway extends normal to a bobbin axis between two bobbins.

8. (currently amended) A wound bobbin set for a toroidally wound electrodynamic machine comprising a set of wound bobbins initially wound as a rectilinear axially aligned array of adjacent bobbins and formed into a circular array, the windings of two or more bobbins in each phase being formed from a continuous wire or a continuous set of parallel wires.

9. (previously presented) A wound bobbin set as claimed in claim 8 characterised in that the winding method and bobbins provide free space between the bobbins sufficient to allow forming them into a circular array while still providing contact between the bobbins on the side of the bobbin.

10. (original) A wound bobbin set as claimed in claim 8 characterised in that the bobbins are tapered on the inner cheeks to facilitate forming into a circular array.

11. (previously presented) An electrodynamic machine when fitted with a winding as claimed in claim 8.

12. (new) A method of winding a toroidally wound electrodynamic machine, comprising the steps of:

locating a set of bobbins in a rectilinear axially aligned array of adjacent bobbins;

winding the rectilinearly located bobbins with one of
i) a continuous wire and ii) a continuous set of parallel wires
for each phase; and

forming the wound bobbins into a circular array
suitable for an electrodynamic machine winding of a toroidally
wound electrodynamic machine so that a resulting flux associated
with each bobbin is circumferential and axially aligned with an
adjacent bobbin to define an overall torus-shaped resulting flux.

13. (new) A method as claimed in claim 12, wherein each phase is wound one bobbin at a time.

14. (new) A method as claimed in claim 12, wherein the assembly of pre-wound and electrically connected bobbins is formed into a circular array positioned about a toroidal core of magnetic material, such core passing through an aperture in each bobbin.

15. (new) A method as claimed in claim 12, wherein the bobbins interfit, to positively locate with each other.

16. (new) A method as claimed in claim 15, wherein the bobbins are manufactured jointly, as a single part or multiple inter-fitting parts which may be deformed into a toroid after winding.

17. (new) A method as claimed in claim 12, wherein the bobbins are provided with pathways to support the wires as they pass from one bobbin to another.

18. (new) A method as claimed in claim 17, wherein, part of the pathway extends normal to a bobbin axis between two bobbins.

19. (new) The method of claim 12, wherein,
the bobbins have an external shelf, one edge of each
external shelf forming a pivot axis between the bobbins,
the wire is routed between bobbins and are supported by
the external shelf, and
the bobbins each have tapered edges on one side for
defining a curved path when forming the wound bobbins into the
circular array.

20. (new) The method of claim 19, wherein,
the bobbins each have a cavity and an extension such
that the extension of each bobbin fits into the cavity of an
adjacent bobbin.